

To become possessor of means sufficient to "blow up the planet" in practice turned out to be an extremely complex matter. The US, for example, during the post-war years spent approximately 37 billion dollars on atomic programs. However, the realization of even such grandiose programs by no means lessened the burden which the US economy continues to carry in connection with the preparation for a new world war. The striving for such a war gives rise to ever new military-technical problems. The production of not only nuclear weapons, but the means of delivery of these weapons, and the organization of anti-air and anti-missile defense, etc., require huge economic efforts. The material aspect of each of these programs is reflected in the creation of a complex scientific research, experimental and production base, in large-scale military construction, and in the expenditures of a huge amount of economic resources. Let us take, for example, the economy of the construction of missile bases in the US. Only one deep launch position for the "Titan II" missile represents a shaft with a diameter of 16 meters and a depth of 46 meters. A 9-story gallery, used for servicing the missile, was created around its walls. For the creation of such a structure, it is necessary to extract 150,000 cubic meters of earth, and to use 91,000 cubic meters of concrete, 18,000 tons of steel and a large amount of other materials.

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Col. VIASITOVICH - MEMBER OF AN ...

Under modern conditions, when technological development is proceeding at an unprecedented high rate, this tenet sounds still more topical. The "moral wear" of military equipment has become a heavy burden even for the most highly developed countries. The rapid change in the "ages" of armament is constantly increasing, while the duration of life of each of them is becoming shorter. We will illustrate this with examples. In the US during the post-war years, the fleet of strategic bombers was completely replaced three times. Many missile systems which recently were considered the most modern have been scrapped. From 1959 until 1962, for example, 13 squadrons of "Atlas" intercontinental ballistic missiles were created in the US. This complex and expensive system of weapons was less long-lived than many types of airplanes. By the end of 1965, all these missiles were removed from combat positions as they did not meet modern demands.

Huge sums are devoured by the programs for working out and improving weapons. Among them, the programs for the creation of strategic missile complexes, systems of anti-air and anti-missile defense, and military-space programs etc., are particularly notable. For example, in the United States during the past 10 years approximately 40 billion dollars have been spent in developing ballistic missiles.

A number of essentially new types of rocket armament have been created by the heroic labor of our workers, engineers, designers and scientists. In a short period, an entire complex of diverse strategic means of struggle has been put into operation. Among these means, mobile launches for strategic rockets, and means of equipping the submarine fleet and long-range rocket-bearing aviation have particularly important significance. The power of weapons intended for carrying out operational-tactical missions has also grown. The equipping of the Armed Forces with conventional means of struggle has been increased proportionately. Armored and artillery equipment has been improved still further. The equipping of the ground forces with mechanized means of movement has been increased, and the percentage of armor cover for troops has grown. New highly effective air defense rocket systems and aviation complexes of interceptor-aircraft have been worked out and acquired as armament.

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Major Lt Col Yu Sidorov and Major Lt Col Ye
Sidorov "Laser Weapons - Basis of Potential
From the Foreign Press"

6 June 1967 RED STAR

The qualities of lasers as a source of ray energy with fundamentally new qualities provided the foundation for the speculations of the foreign press on the possibility of creating ray weapons which would melt metal over great distances and instantaneously destroy manpower and technical equipment. During the initial work a great future was predicted for this ray. It was also supposed that it would be possible to use lasers as a tactical weapon on the battlefield for the destruction of manpower and also as a weapon in the antirocket defense system to destroy the warheads of ballistic rockets and cosmic objects.

~~is one flash every 10 seconds~~. It was mentioned in the press, however, that the laser gun was a rather primitive means of destruction, since it could affect the organs of sight only if the "victim" was looking into the "barrel" of the laser weapon. Even a light fog or smoke can considerably weaken the effect of laser gun. In this connection, American specialists consider the use of ray weapons in antirocket and space systems more promising.

This viewpoint is upheld both in the Pentagon and by the leading scientists connected with it. General McConnell, the Chief of Staff of the U.S. Air Force, has stated: "We must continue the efforts to improve the existing systems, such as rockets, and must, as previously, strive to master such most promising discoveries as the laser..."

The American scientist Doctor A. (Kontrovich--as transliterated), who considers ray weapons the weapons of the future, states: "I am convinced that to counter-balance the vast power of an attack by nuclear energy we must resort to such revolutionary types of weapons as ray weapons which are capable of striking over great distances with the speed of light or lightning."

Commentaries on such statements point to the main advantages of laser weapons compared with conventional types of weapons. Thus the instantaneousness of action (with the speed of light) and the virtual absence of the need to compensate for movement of the target during the aiming and to calculate the point of impact on the target are emphasized.

The authors of publications in the foreign press base the principle of laser weapons which would counteract rocket and space systems on the fact that the sharply focused laser ray can create an extremely high temperature on the surface of the affected object through the great density of the employed power. Thus two possible methods of the possible use of laser weapons are expounded: They could be installed aboard an antirocket or antisputnik, and they could be set up on the ground. In the first case a powerful laser must be installed in a satellite, which would be guided by an aiming and target-tracking radar as well as by an optical-electronic precision-target tracking locator on board. Nor is the possibility excluded of creating a special orbiting platform on board which systems for the detection and tracking of objects could be installed as well as powerful laser installations possessing systems that could be recharged (podkachka) by sunlight. It is planned to place powerful ground laser installations for the struggle against intercontinental rockets, on mountaintops to reduce the influence of the dense lower strata of the atmosphere.

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Major Lt Col. Yu. Dzhirnyov and Major Capt Ya. Sukhanov "Laser Weapons--Based on Material From the Foreign Press"
6 June 1967 RED STAR

At the same time the obvious shortcomings of methods which hamper the possibilities of their implementation are pointed out. Thus when the ground type variant of laser weapons is used, its effectiveness is perceptibly reduced even in the undimmed atmosphere and if there are clouds it cannot be used at all. It also is noted that as a matter of principle the power of radiation in the beam of ground laser installations cannot be boosted endlessly, since at a certain density of the stream of rays an electric "sparkover" (proboi) of the air occurs as though the light channel were slammed and closed. This happens because the electron energy contained in the light impulse of the laser is spent on the ionization of molecules and atoms. Externally the "slamming" of the light channel is accompanied by the emergence of a short electric spark. Thus a natural top limit of the power of the laser rays exists under ground conditions.

Foreign specialists point out that the fact cannot be ignored that so far a great gap still exists between the power actually obtained in the laser ray and that with which is necessary to strike at the fighting parts of rockets and space objects. It is believed that these difficulties can be overcome if a sharp increase in the density of the radiation of existing lasers per volume unit of the active matter can be achieved as well as a substantial increase in the efficiency rate, which now only amounts to a few percent in the best foreign models. One method of obtaining powerful laser impulses requires the simultaneous use of a great many lasers. But the technical difficulties of implementing this method are rather great, as is noted in the press.

The emergence of rocket-nuclear weapons has complicated the problem of protecting the population. Whereas in the past measures of local antiair defense were implemented only in individual cities and certain objectives, at present it is necessary to take antinuclear defense measures on the territory of the whole country in order to protect the people and the material assets. This is why in order to prevent being caught unaware, it is necessary to strengthen the country's civil defense on an equal footing with the constant perfection of its armed forces, antiair, antirocket, and antispace defenses. Civil defense has today acquired the significance of a very important type of strategic guarantee of any country's viability.

Soviet military doctrine proceeds from the fact that the best means of protecting our state against nuclear attack are our powerful rocket troops, our antimissile rockets (antirakety) and our fighter-interceptors, which are called upon to prevent the enemy's nuclear rockets and aircraft from intruding into our airspace. They will be destroyed even before they have come close to the Soviet border. Along with all this, however, we must also be ready to liquidate the consequences of the enemy's rocket-nuclear blows.

ILLEGIB

KOSYGIN

WAR 12

25 Jun 67 press conf, NY

Question--UPI correspondent: What are the prospects for an agreement between the United States and the Soviet Union on limiting the development of antiballistic missile systems? Is there any hope of resolving the problem of safeguards for the proposed treaty banning the spread of nuclear weapons?

Answer: As regards the antimissile system, our position is well known. We believe that the discussions should center not on the problem of an antimissile defense system, because, after all, an antimissile system is not a weapon of aggression or of attack; it is a defensive system. We feel, therefore, that what should be considered is the entire complex of questions of disarmament, that is, abolition of both offensive and defensive weapons. If instead of building and deploying an antiballistic missile system the money is used to build up offensive missile systems, mankind will not stand to gain anything. It will, on the contrary, face a still greater menace and will come still closer to war. It is, therefore, impossible to consider the question of antimissile systems in isolation from the entire disarmament problem. It should be discussed as part of the problem of universal disarmament.

The Strategic Rocket Troops, equipped with the most modern nuclear-rocket weapons, are capable of hitting strategic objectives of the enemy in any part of the world in a short period of time. Their concentrated attacks, delivered with great precision, are virtually unstoppable.

Together with the development of ballistic rockets in our country, important work was done for the production of nuclear weapons. Soviet nuclear ammunition, which was produced in the late 1940's and early 1950's, became the basis for the development of a new system of combat weapons and of military affairs in general. At present nuclear charges for all types of rockets and for other carriers are available in all branches of the Soviet Armed Forces.

The use of rockets as carriers for nuclear charges marked the beginning of a new stage in the development of our Armed Forces. While the rockets used in World War II carried ordinary low-power TNT charges, the rockets connected with nuclear charges have become a qualitatively new weapon. Aircraft, and in particular strategic aircraft, may also be carriers for powerful nuclear ammunition; however, their vulnerability to means of air defense, the need for a wide network of airfields (which can be easily detected by the enemy), the long period of flight to distant targets and the fact that they are dependent on weather conditions may impede the use of the new weapons. Nuclear charges and rockets have become elements of one whole: the ammunition has been provided with a means of delivery which guarantees the quick, effective use of its enormous destructive force, while the rockets with their unlimited range and high speed of flight, and their suitability for concealment, have supplemented the powerful nuclear means of destruction.

Therefore, the mass production of nuclear ammunition of various degrees of power, and of rockets intended as means of delivery to the target, as well as their widespread distribution among the troops, resulted in radical changes in military affairs.

VERSCHILLEN

MAR 12

9 Jul 67 PRAVDA

The most effective types of aircraft have been precisely selected for the front-line air force. They are all-weather fighters, fighter-bombers, and reconnaissance aircraft. All-weather supersonic fighters are capable of operating over a wide range of altitudes--from the ground up to the threshold of the cosmos. The fighter-bombers, too, are supersonic aircraft. They are capable of destroying small moving targets on the ground as well as enemy aircraft in the air. The modern reconnaissance aircraft, capable of the same combat performances as the other aircraft of the front-line air force, are equipped with the most complex and perfect apparatus for the detection and identification of objects in the air and on the ground.

Our long range aircraft are a powerful strike force. As is well-known, our Armed Forces have available the most powerful nuclear charges -- the equivalent of up to 100 million tons of TNT. This might threateningly warns: do not joke, gentlemen! Our super-long range and intercontinental ships are capable of overcoming the greatest distances and of dealing a shattering blow to the enemy, not entering into the zone of its antiaircraft defense. In essence this type of aircraft possesses all the capabilities of carrying out combat actions on a global scale.

The Soviet people can calmly rely on those who, together with the rocket troops, are guarding the skies of the Fatherland -- the fighter aircraft of the PVO strany troops. Powerful supersonic planes long ago broke the sound barrier and have shot up into the higher altitudes. They can intercept supersonic planes and rockets at any echelon or in any weather. Military transport aircraft has changed beyond recognition, is ready at any time to transfer large landing operations to great distances with arms and equipment, and is capable of solving not only tactical but also strategic tasks. Planes which fly reconnaissance scouts and crews of naval and helicopter aviation have high combat qualities.

VOROSHILOV

WAR 12

21 July 1967 RED STAR

Today the arsenals of the Soviet Army and Navy contain a sufficient number of all kinds of combat means--ballistic and intercontinental rockets and antirocket weapons, supersonic jet aircraft, atomic submarines, tanks, artillery, computers, and various types of small arms. This powerful equipment demands knowledge and knowhow, and precise and safe activity undertaken automatically. This is why we must improve our combat mastery every day and every hour.

The author traces the development and improvement of radioelectronics, radar equipment, and automation, as well as the creation of electronic computers capable of guiding a rocket to the target without interference by man. Modern radar equipment is being used more and more broadly by the Strategic Rocket Troops, the PVO servicemen, the rocket units of ground troops, and rocket-carrying aircraft and ships. The implementation of anti-rocket defense is also impossible without the use of radar means for long-range detection and destruction of enemy rockets.

ABM

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WAR 12

TASS 21 Sept report from Review of LIFE
ABROAD No. 39 on US planned ABM system

[Text] The biggest event of the week in the United States, in the magazine's opinion, was the U.S. Government's decision to step up the arms race by deploying an antiballistic missile system. This step promises huge profits for U.S. corporations. [This is the only mention of the recent U.S. decision concerning an antiballistic missile system monitored from Soviet transmissions as of 21 September.] [MEN's announcement 18 Sept 1961]

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WAR 11

Approved For Release 2004/12/15 : CIA-RDP69B00369R000200080034-9 participating in
major exercises - 1 Oct 67 (LBS)

Operational-tactical missiles capable of dealing a quick and powerful blow at enemy troops at a great distance from the front line made an impressive sight. The column was closed by antiaircraft missiles which at the exercises covered the troops from "enemy" blows from the air. These missiles can hit air targets at very small, as well as great heights, irrespective of the time of day and wheather.